

LOW TEMPERATURE SINTERING OF NICKEL FERRITE POWDERS

ABSTRACT

Method of producing sintered nickel ferrite powder having steps of mixing the particles of iron oxide and nickel oxide with an alkali metal borate mineralizer, compacting the mixture to produce green compact and heating the compact at temperatures less than about 1400° C. Resulting product which may be in the form of a non-consumable electrode for electrolysis of alumina, exhibits satisfactory mechanical properties and electrical properties with enhanced chemical stability while being produced at significantly lower sintering temperatures than previously employed.